



SEQUENCE LISTING

<110> David

Kennedy, Michael J

<120> Salmonella Vaccine Materials and Methods

<130> 28341/6114.N

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<150> 60/190,178

<151> 2000-03-17

<160> 30

<170> PatentIn Ver. 2.0

<210> 1

<211> 779

<212> DNA

<213> Salmonella dublin

<400> 1

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gcttttaggtc ttttaaactg gtcggcacaa caattgaatg tgtttttctt ctcaatgccg 660
ctcaaaagta tattggttct actgacgctc ctgatctcat tcccttatgc tcttcatcac 720
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<211> 779

<212> DNA

<213> *Salmonella typhimurium*

<400> 2

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gcttttaggtc ttttaaactg gtcggcaca caattgaatg tgtttttctt ctcaatgccg 660
ctcaaaagta tattggttct actgacgtc ctgatctcat tcccttatgc tcttcacac 720
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<210> 3

<211> 749

<212> DNA

<213> *Salmonella dublin*

<400> 3

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tctccgagct cagttgccgt atttataaaa tattcaccac aggtcaatat ggaggccttt 480

cggtgtaaaaa ttaaggattt aatagagatg tcaatccctg gggtgcaata cagtaagatt 540
 agtatcttga tgcagcctgc tgaattcaga atggtagctg acgtaccgc gagacaaaca 600
 ttctggatta tggacgttat caacgccaat aaaggggaagg tggagaagtg gttgatgaaa 660
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<210> 4

<211> 749

<212> DNA

<213> *Salmonella typhimurium*

<400> 4

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 ttctggatta tggacgttat caacgccaat aaaggggaagg tggagaagtg gttgatgaaa 660
 tacccttatac agttgatgtt atcggtgaca ggactgttat taggagtggg catcctgatac 720
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<210> 5

<211> 1052

<212> DNA

<213> *Salmonella dublin*

<400> 5

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 gaggttttac atctgctctc agagaactat gatacggcta ttactattag cccattgata 180
 acagctacat ttagtggaag aattccgctt ggaccaccgg tcgatatttt gaataacctg 240

gcagcacaat atgatttgct tacctgggtt gatggcagca tggtatatgt atatcctgca 300
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accaaagctg tggaggtgag cgggtgtccc agctgcctga ctcgtattag tcaattagct 480
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attgcgttca atacaggttt gaatgacggt ggtgctagcg gttttttcaa cggtaatcag 960
cgatacctca aactttatgg tgcgtttgaa tgccctggaa aaaagctctc aggccttatgt 1020
actttcccag ccattctgtg tgactttaaa ta 1052

<210> 6

<211> 1052

<212> DNA

<213> Salmonella typhimurium

<400> 6

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gaggttttac atctgctctc agagaactat gatacggcta ttactattag cccattgata 180
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accaaagctg tggaggtgag cgggtgtccc agctgcctga ctcgtattag tcaattagct 480
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gaattagatc aacgccagca gatgatagag atttcggtga aaattatcga tgttaatgct 840
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 cgatacctca aactttatgg tgcgtctgaa tgccctggaa aaaagctctc aggccttatgt 1020
 actttccag ccatctgtgg tgactttaaa ta 1052

<210> 7

<211> 368

<212> DNA

<213> Salmonella typhimurium

<400> 7

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 aactatcata acggtcgtat tcacttatgt cagatactca agcaaaccctt cttagacgaa 180
 gaactgcttt ttaaagcggt ggctaactgg aaaccgcgag cgttccaggg tattcctcaa 240
 cgattatfff tgttgcgca tgggcttgca atgagttggt ctccacctct ttccagctcc 300
 gccgagctct ggttacgatt acatcatcga caaataaaat ttctggagtc gcaatgcggt 360
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<210> 8

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 8

tggcttttat tcgaccattg agcctttc 28

<210> 9

<211> 27

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 9

tttatcgctt tcaaccaaag agtgatg

27

<210> 10

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 10

gccaatctag aaattatttt cggaatttga taaa

34

<210> 11

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 11

aggctgttct gttttctcgc tcacattcaa ccatgctctc caattcgta

49

<210> 12

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 12

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49

<210> 13

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 13

gccaatctag atcttttcta atcttataat attg

34

<210> 14

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 14

gccaatctag actgcagaac cgagccagga gcaa

34

<210> 15

<211> 46

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 15

cacctcgga tcaggtcggc tcataaaaaa ttaatcttct gctggt

46

<210> 16

<211> 46

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 16

aacagcagaa gattaatttt ttatgagccg acctgatccc gaggtg

46

<210> 17

<211> 35

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

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gccaatctag agaagataat ctcggtaaga gaagt

35

<210> 18

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 18

gccaatctag attcaaattg taagttttta tgtcaat

37

<210> 19

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 19

tttatccagc acagcctgga tattacattt tataccccac ccgaataaag

50

<210> 20

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 20

ttattcgggt ggggtataaa atgtaatatc caggctgtgc tg

42

<210> 21

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 21

gccaatctag attccccggca tcaacaaata aact

34

<210> 22

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 22

gccaaagtca catagtaggt gttctgtggg caata

35

<210> 23

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 23

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48

<210> 24

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 24

tcaggactca atcacttatc aaacaatcat aatagctata atccagaa

48

<210> 25

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 25

gccaagtcga cgtgtacgaa caggcttcag tggat 35

<210> 26

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 26

gccaatctag atcaggcatt agaaatagcg cgta 35

<210> 27

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 27

attttaata tacgattaaa cgctcaaaca tttgccttc ttcaaaga 48

<210> 28

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 28

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<210> 29

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 29

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35

<210> 30

<211> 368

<212> DNA

<213> S. dublin ssaM

<400> 30

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aactatcata acggtcgtat tcacttatgt cagatactca agcaaaccctt ctagacgaa	180
gaactgcttt ttaaagcggt ggctaactgg aaactcgag cgttccaggg tattcctcaa	240
cgattatfff tgttgcgcga tgggcttgca atgagttgtt ctccacctct ttccagctcc	300
gccgagctct ggttacgatt acatcatcga caaataaaat ttctggagtc gcaatgcgtt	360
catggtta	368